

**Notice of Allowability**

Application No.

09/369,790

Examiner

LeChi Truong

Applicant(s)

STEINMAN ET AL.

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on 06/23/2006.
2. ☒ The allowed claim(s) is/are 1, 3-8, 10, 12-17, 19-31, 33-39 now renumbered as claims 1-34.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application   |
| 2. <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)            | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>9/15/2006</u> |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                        |
|  | 9. <input type="checkbox"/> Other _____   |

  
WILLIAM THOMSON  
ADVISING PATENT EXAMINER

***Allowable Subject Matter***

1. Claims 1, 3-8, 10, 12-17, 19-31, and 33-39 are allowed.

2. The following is an examiner's statement of reasons for allowance:

As to claims 1, 10, 19, 25, 31, the prior art as taught Waldo et al (US. Pat 5,815,709), Cowsar et al (US. Patent 5,615,400) and Sabatella (US. Patent 5,561,800) do not teach or render obvious the limitations recited in claims 1, 10, 19, 25, 31 when taken in the context of the claims as a whole, check code generator transforms said interface of said dynamically linkable component into said interface identifier by transforming a textual representation of at least a portion of said interface, as recited in the independent claims 1, 10, 19, 25, 31. Moreover, evidence for modifying the prior art teachings by one of ordinary skill level in the art was not uncovered so as to result in the invention as recited in claims 1, 10, 19, 25, and 31.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Art Unit: 2194


Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomson, William can be reached on (571) 272 3718. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

September 14, 2006

  
WILLIAM THOMSON  
SUPERVISORY PATENT EXAMINER

### **Examiner's Amendment**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Joel Justiss, (Reg. No. 48,981) on 9/12/ 2006.

3. Amend the following claims:

1. (Currently Amended) A computer-based system for validating an interface of a dynamically linkable component, comprising:

- a check code generator that employs filtering directives to include or exclude textual interface information to transform said interface of said dynamically linkable component into an interface identifier representing said interface and couples said interface identifier to said dynamically linkable component; and

- an interface verifier that employs said interface identifier to determine a compatibility of said interface of said dynamically linkable component by comparing said interface identifier with an interface identifier history list representing a history of modifications to said interface, said history list containing at least one member,

wherein said check code generator transforms said interface of said dynamically linkable

component into said interface identifier by transforming a textual representation of at least a portion of said interface.

2. (Cancelled)

3. (Original) The system as recited in Claim 1 wherein said check code generator couples said interface identifier to said dynamically linkable component by placing said interface identifier in a types declaration file.

4. (Original) The system as recited in Claim 1 wherein said interface identifier varies as a function of a version of said dynamically linkable component.

5. (Original) The system as recited in Claim 1 wherein said interface verifier employs said interface identifier to determine a compatibility of said dynamically linkable component with a second dynamically linkable component.

6. (Original) The system as recited in Claim 1 wherein said interface verifier is a part of a second dynamically linkable component.

7. (Previously Presented) The system as recited in Claim 1 wherein said history list contains at least two members.

8. (Original) The system as recited in Claim 1 wherein said interface identifier is a type selected from the group consisting of:

a check sum, and

a cyclic redundancy check.

9. (Cancelled)

10. (Currently Amended) A computer-implemented method of validating an interface of a dynamically linkable component, comprising:

employing filtering directives to include or exclude textual interface information to transform-said interface of said dynamically linkable component into an interface identifier representing said interface;

coupling said interface identifier to said dynamically linkable component; and

employing said interface identifier to determine a compatibility of said interface of said dynamically linkable component by comparing said interface identifier with an interface identifier history list representing a history of modifications to said interface, said history list containing at least one member,

wherein said employing is performed by a check code generator to transform said interface of said dynamically linkable component into said interface identifier by transforming a textual representation of at least a portion of said interface.

11. (Cancelled)

12. (Original) The method as recited in Claim 10 wherein said coupling comprises placing said interface identifier in a types declaration file.

13. (Original) The method as recited in Claim 10 wherein said interface identifier varies

as a function of a version of said dynamically linkable component.

14. (Original) The method as recited in Claim 10 wherein said employing comprises employing said interface identifier to determine a compatibility of said dynamically linkable component with a second dynamically linkable component.

15. (Original) The method as recited in Claim 10 wherein said interface verifier is a part of a second dynamically linkable component.

16. (Previously Presented) The method as recited in Claim 10 wherein said history list contains at least two members.

17. (Original) The method as recited in Claim 10 wherein said interface identifier is a type selected from the group consisting of:

- a check sum, and
- a cyclic redundancy check.

18. (Cancelled)

19. (Currently Amended) A computer-based system for validating an interface of a dynamically linkable component, comprising:

an interface identifier, generated by filtering textual information present in said interface and coupled to said dynamically linkable component, that represents said interface of said dynamically linkable component; and

an interface verifier that employs said interface identifier to determine a compatibility of said interface of said dynamically linkable component by comparing said interface identifier with an interface identifier history list representing a history of modifications to said interface, said history list containing at least one member,

wherein said generating is performed by a check code generator that transforms said interface of said dynamically linkable component into said interface identifier by transforming a textual representation of at least a portion of said interface.

20. (Original) The system as recited in Claim 19 wherein said interface identifier is contained within a types declaration file.

21. (Original) The system as recited in Claim 19 wherein said interface identifier varies as a function of a version of said dynamically linkable component.

22. (Original) The system as recited in Claim 19 wherein said interface verifier employs said interface identifier to determine a compatibility of said dynamically linkable component with a second dynamically linkable component.

23. (Original) The system as recited in Claim 19 wherein said interface verifier is a part of a second dynamically linkable component.

24. (Previously Presented) The system as recited in Claim 19 wherein said history list contains at least two members.



25. (Currently Amended) A computer-implemented method of validating an interface of a dynamically linkable component, comprising:

generating an interface identifier by employing filtering directives to include or exclude textual information present in said interface;

coupling said interface identifier to said dynamically linkable component; and

employing said interface identifier to determine a compatibility of said interface of said dynamically linkable component by comparing said interface identifier with an interface identifier history list representing a history of modifications to said interface, said history list containing at least one member,

wherein generating is performed by a check code generator that transforms said interface of said dynamically linkable component into said interface identifier by transforming a textual representation of at least a portion of said interface.

26. (Original) The method as recited in Claim 25 wherein said coupling comprises placing said interface identifier in a types declaration file.

27. (Original) The method as recited in Claim 25 wherein said interface identifier varies as a function of a version of said dynamically linkable component.

28. (Original) The method as recited in Claim 25 wherein said employing comprises employing said interface identifier to determine a compatibility of said dynamically linkable component with a second dynamically linkable component.

29. (Original) The method as recited in Claim 25 wherein said interface verifier is a part

of a second dynamically linkable component.

30. (Previously Presented) The method as recited in Claim 25 wherein said history list contains at least two members.

31. (Currently Amended) A real-time process control system, comprising:  
a plurality of sensors and controllable devices;  
a controller, coupled to said plurality of sensors and controllable devices, that executes software having at least first and second dynamically linkable components to coordinate an operation of said plurality of sensors and controllable devices;  
an interface identifier, generated by filtering textual information present in said interface and coupled to said first dynamically linkable component, that represents an interface of said first dynamically linkable component; and  
an interface verifier that employs said interface identifier to determine a compatibility of said interface of said first and second dynamically linkable components by comparing said interface identifier with a history list representing a history of modifications to said interface, said history list associated with said second dynamically linkable component and containing at least one member,  
wherein said generating is performed by a check code generator that transforms said interface of said dynamically linkable component into said interface identifier by transforming a textual representation of at least a portion of said interface.

32. (Cancelled)

33. (Original) The real-time process control system as recited in Claim 31 wherein said interface identifier is contained within in a types declaration file.

34. (Original) The real-time process control system as recited in Claim 31 wherein said interface identifier varies as a function of a version of said first dynamically linkable component.

35. (Original) The real-time process control system as recited in Claim 31 wherein said interface verifier is a part of said second dynamically linkable component.

36. (Previously Presented) The real-time process control system as recited in Claim 31 wherein said history list is associated with said second dynamically linkable component and contains at least two members.

37. (Original) The real-time process control system as recited in Claim 31 wherein said interface identifier is a type selected from the group consisting of:

- a check sum, and
- a cyclic redundancy check.

38. (New) The system as recited in Claim 1 wherein said filtering directives are configured to substantially avoid alpha and beta errors.

39. (New) The method as recited in Claim 10 wherein said employing filtering directives substantially avoids alpha errors.

Art Unit: 2194

***Conclusion***

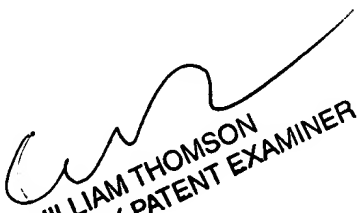
Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is ( 571) 272 3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomson, William can be reached on (571) 272 3718. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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